



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,410	06/16/2000	Hu Yang	2039.007400	1569

23720 7590 12/24/2002

WILLIAMS, MORGAN & AMERSON, P.C.  
10333 RICHMOND, SUITE 1100  
HOUSTON, TX 77042

EXAMINER
----------

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 12/24/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/595,410

Applicant(s)

YANG ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1711

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): see attachment.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.Claim(s) objected to: 8 and 9.Claim(s) rejected: 1-3, 6, 7, 9-22, 25, 26, 28-50, 52-62 and 64-72.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Jeffrey C. Mullis  
J Mullis  
Art Unit: 1711

Art Unit 1711

Applicants' arguments filed 11-27-02 have been fully considered but they are not deemed to be persuasive.

Applicants' remarks regarding the rejection under 35 U.S.C. § 112 is moot since this rejection is hereby expressly withdrawn.

With regard to the rejection under 35 U.S.C. § 103 relying upon Bansleben as primary reference, applicants appear to be correct that Bansleben does not report examples of blends of polymers comprising 4-vinyl cyclohexene units with oxygen barrier polymers. However Bansleben et al. specifically disclose that a composition may be produced from strained cyclic alkylene polymers (including those having 4-vinyl cyclohexene units) with "polymeric diluents". Note the Abstract and that such diluents include oxygen barrier polymers such as PET at column 4 lines 12-15. Therefore while the primary reference does not appear to anticipate any elected or non-elected embodiment of the claims, the primary reference does suggest the composition of the claims.

Applicants argue that Cahill does not discuss cycloalkenyl moieties as oxygen scavengers. However the test for obviousness is not what would occur to those of ordinary skill in the art when viewing one reference and then another, but rather what the combination of references would suggest. In the instant case, the primary reference alone suggests the composition of the broadest (independent) claims as discussed above. Since Bansleben et al. suggest a blend of applicants' specific vinyl

Art Unit 1711

cyclohexene polymer and PET, applicants' independent claims are deemed obvious over the primary reference. While it is true that some of Bansleben's embodiments lie outside of the claims such as those involving polymerization of cyclopentene, the number of embodiments outside applicants' claims are sufficiently limited such that a strong prima facie case of obviousness can be made over Bansleben et al. Thus it is incumbent upon applicants to provide unexpected results over the closest prior art which at this point appears to be Bansleben et al. While possibly applicants' claimed invention is superior to Bansleben's, no unexpected results comparative to Bansleben are of record. Applicants argue that the reference makes no mention of the benzophenone derivative photoinitiators containing at least two benzophenone moieties. However such materials are taught by the primary reference. For instance note the last two lines of column 4. With regard to the compatibilizer recited by claim 7, as set out in the rejection in the first Office action, the styrene butadiene block copolymer of the primary reference is an art recognized compatibilizer. With regard to the claim 8 which requires the compatibilizer be specifically anhydride or acid modified materials, claim 8 is hereby allowable over the prior art. With regard to claim 9, this claim is also now allowed over the prior art. If applicants intend to rewrite claim 8 in independent form, they are requested to insert the term

Art Unit 1711

"anhydride-modified or acid modified" term before "polyethylene vinyl acetate" and "polyethylene" to increase clarification. If applicants do not intend that the phrase "anhydride-modified or acid-modified" does not apply to the polyethylene vinyl acetate or polyethylene and that unmodified polyethylene vinyl acetate or polyethylene is intended as a compatibilizer, they are requested to contact the Examiner before making any amendment. At present however, claim 8 is viewed as embracing only acid or anhydride modified materials and claim 8 would of course be viewed the same way if amended to be in independent form.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

December 20, 2002

Jeffrey Mullis  
Primary Examiner  
Art Unit 1711

